

# UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO.         | D. FILING DATE    |            | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO         |  |  |
|-------------------------|-------------------|------------|----------------------|-------------------------|-------------------------|--|--|
| 10/787,353              | 87,353 02/26/2004 |            | Peter Ryser          | X-1503 US               | . 4877                  |  |  |
| 24309                   | 7590              | 09/13/2006 |                      | EXAM                    | EXAMINER                |  |  |
| XILINX, IN<br>ATTN: LEG |                   | RTMENT     | PATEL, A             | PATEL, ANAND B          |                         |  |  |
| 2100 LOGIC              |                   | KIMENI     | ART UNIT             | PAPER NUMBER            |                         |  |  |
| SAN JOSE,               | CA 9512           | 24         | 2116                 |                         |                         |  |  |
|                         |                   |            | •                    | DATE MAILED: 09/13/2006 | DATE MAILED: 09/13/2006 |  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                        | Application                                                                                                              | No.                                                                                                 | Applicant(s)                                                  |                  |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------|------------------|--|--|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                        | 10/787,353                                                                                                               |                                                                                                     | RYSER, PETER                                                  |                  |  |  |
| Offi                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ce Action Summary                                                                                                                                                                                                                                                                                                                      | Examiner                                                                                                                 |                                                                                                     | Art Unit                                                      |                  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                        | Anand Pate                                                                                                               |                                                                                                     | 2116                                                          |                  |  |  |
| The MA<br>Period for Reply                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | AILING DATE of this communicati                                                                                                                                                                                                                                                                                                        | on appears on the o                                                                                                      | over sheet with the c                                                                               | orrespondence ad                                              | ddress           |  |  |
| WHICHEVER - Extensions of time after SIX (6) MOI - If NO period for refailure to reply we have reply received.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ED STATUTORY PERIOD FOR IS LONGER, FROM THE MAILING HE may be available under the provisions of 37 NTHS from the mailing date of this communicate ply is specified above, the maximum statutor within the set or extended period for reply will, but by the Office later than three months after the madjustment. See 37 CFR 1.704(b). | NG DATE OF THIS<br>CFR 1.136(a). In no event<br>tion.<br>y period will apply and will a<br>by statute, cause the applica | COMMUNICATION , however, may a reply be timexpire SIX (6) MONTHS from the strong to become ABANDONE | N. nely filed the mailing date of this c D (35 U.S.C. § 133). | •                |  |  |
| Status                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                        |                                                                                                                          |                                                                                                     |                                                               |                  |  |  |
| 2a) ☐ This act                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | sive to communication(s) filed or<br>tion is <b>FINAL</b> . 2b)<br>his application is in condition for a<br>n accordance with the practice u                                                                                                                                                                                           | ☐ This action is not allowance except for                                                                                | r formal matters, pro                                                                               |                                                               | ·<br>e merits is |  |  |
| Disposition of C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | laims .                                                                                                                                                                                                                                                                                                                                |                                                                                                                          |                                                                                                     |                                                               |                  |  |  |
| 4a) Of th 5) ☐ Claim(s 6) ☑ Claim(s 7) ☐ Claim(s                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | ) <u>13-16 and 18-24</u> is/are pending<br>ne above claim(s) <u>1-12 and 17</u> is.<br>) is/are allowed.<br>) <u>13-16 and 18-24</u> is/are rejected<br>) is/are objected to.<br>) are subject to restriction                                                                                                                          | /are withdrawn fron                                                                                                      |                                                                                                     |                                                               |                  |  |  |
| Application Pape                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | ers                                                                                                                                                                                                                                                                                                                                    |                                                                                                                          |                                                                                                     |                                                               |                  |  |  |
| 10)⊠ The drav<br>Applican<br>Replace                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | cification is objected to by the Exwing(s) filed on <u>26 February 200</u> at may not request that any objection ment drawing sheet(s) including the n or declaration is objected to by                                                                                                                                                | $\frac{4}{3}$ is/are: a) $\square$ accent to the drawing(s) be correction is required                                    | held in abeyance. See if the drawing(s) is ob                                                       | e 37 CFR 1.85(a).<br>jected to. See 37 C                      | FR 1.121(d).     |  |  |
| Priority under 35                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | i U.S.C. § 119                                                                                                                                                                                                                                                                                                                         |                                                                                                                          |                                                                                                     | •                                                             |                  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul> |                                                                                                                                                                                                                                                                                                                                        |                                                                                                                          |                                                                                                     |                                                               |                  |  |  |
| Attachment(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                        |                                                                                                                          |                                                                                                     |                                                               |                  |  |  |
| 1) Notice of Refer<br>2) Notice of Drafts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ences Cited (PTO-892) sperson's Patent Drawing Review (PTO-sciosure Statement(s) (PTO/SB/08) sil Date                                                                                                                                                                                                                                  | 948)                                                                                                                     | Interview Summary Paper No(s)/Mail Do Notice of Informal Po Other:                                  | ate                                                           |                  |  |  |

Application/Control Number: 10/787,353 Page 2

Art Unit: 2116

#### **DETAILED ACTION**

1. Response to Restriction filed 8/1/06 has been entered and as such Group II, Species 1 (claims 13-16, 18-24) has been elected.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 13, 19 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No 6711059 to Sinclair et al (Sinclair).
  - As per claim 13, Sinclair discloses a method of controlling a processor within a data processing system, comprising:
    - Maintaining said processor in a halt condition in response to reset information from said data processing system (column 5, lines 18-20, 31-33);
    - Configuring at least one memory resource in communication with said processor (column 4, lines 66-67; column 5, lines 27-30); and
    - Releasing said processor from said halt condition (column 5, lines 52-56).
  - As per claim 19, Sinclair discloses a method of controlling a processor within a data processing system, comprising:
    - Maintaining said processor in a halt condition in response to reset information from said data processing system (column 5, lines 18-20, 31-33);

Application/Control Number: 10/787,353 Page 3

Art Unit: 2116

• Stopping an execution cycle of said processor (inherent given processor is being initialized);

- Releasing said processor from said halt condition (column 5, lines 52-56);
- Configuring at least one memory resource in communication with said processor (column 4, lines 66-67; column 5, lines 27-30); and
- Starting said execution cycle of said processor (column 5, lines 52-56; inherent given execution of code).

### Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 14-16, 18, 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sinclair in view of US Patent No 6711675 to Spiegel et al (Spiegel).
  - As per claims 14, 20, Sinclair discloses the method wherein said configuring step comprises storing data in said at least one memory resource (column 4, lines 66-67; column 5, lines 27-30). Sinclair fails to explicitly disclose wherein the at least one memory resource is at a location associated with a reset vector of said processor. Spiegel teaches at least one memory resource is at a location associated with a reset vector of said processor (column 2, lines 21-24; figure 1). An advantage of the system taught by Spiegel is the ability to verify a boot sequence in order to anticipate and investigate potential problems (column 1, lines 56-60). It would have been obvious to one of ordinary skill in the art at the time of invention to modify Sinclair with the reset vector pointing to firmware as taught by Spiegel. Motivation to modify is to improve system reliability and decrease boot loading issues.

Application/Control Number: 10/787,353 Page 4

Art Unit: 2116

• As per claims 15, 21, Sinclair discloses the method wherein said data comprises code configured to be executed by said processor (column 5, lines 41-48).

- As per claims 16, 22, Sinclair discloses the method wherein said processor is released from said halt condition in response to storage of said data (column 5, lines 41-48, 52-56).
- As per claims 18, 24, Sinclair discloses the method wherein said processor is embedded within an integrated circuit (figure 1) and wherein said reset information is generated in response to . initialization of said integrated circuit (column 5, lines 18-20).
- As per claim 23, Sinclair discloses the method wherein said configuring step comprises
  - Storing data in said at least one memory resource at a location (column 4, lines 66-67; column 5, lines 27-30); and
  - Setting a program counter of said processor to said location (inherent given execution of loaded code, column 5, lines 52-56).

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anand Patel whose telephone number is (571) 272-7211. The examiner can normally be reached on Mon-Fri 8AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Lynne Browne can be reached on (571) 272-3670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/787,353

Art Unit: 2116

Information regarding the status of an application may be obtained from the Patent Application .

Information Retrieval (PAIR) system. Status information for published applications may be obtained

from either Private PAIR or Public PAIR. Status information for unpublished applications is available

through Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer

Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR

CANADA) or 571-272-1000.

**ABP** 

JAMES K. TRUSILLO

Page 5

PRIMARY EXAMINER

TC 2100